

## COASTAL CONSERVANCY

Staff Recommendation  
September 25, 2008

### ESTERO AMERICANO DAIRY ENHANCEMENT, PHASE II

File No. 08-084-01  
Project Manager: Matthew Gerhart

**RECOMMENDED ACTION:** Authorization to disburse up to \$155,000 to the Gold Ridge Resource Conservation District for the implementation of dairy enhancement projects in the Estero Americano watershed in Sonoma and Marin counties.

**LOCATION:** Estero Americano, Marin and Sonoma Counties

**PROGRAM CATEGORY:** Resource Protection, Preservation of Agricultural Land

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#### **EXHIBITS**

- Exhibit 1: [Project Location](#)  
Exhibit 2: [Estero Americano Watershed Map](#)  
Exhibit 3: [Map - Location of Dairy Enhancement Projects](#)  
Exhibit 4: [Project Letters](#)
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#### **RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31150-31156 and Section 31220 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed \$155,000 (one hundred fifty five thousand dollars) to the Gold Ridge Resource Conservation District (RCD) for the implementation of dairy enhancement projects on agricultural properties in the Estero Americano watershed in Sonoma and Marin counties, subject to the condition that prior to the disbursement of any Conservancy funds with respect to a particular project site:

1. The Executive Officer of the Conservancy (“the Executive Officer”) shall approve in writing
    - a. A work plan, budget and project schedule, and any contractors and subcontractors to be employed in the project.
    - b. A plan for the installation and maintenance of signage acknowledging the Conservancy funding, which details the design and location of the proposed sign(s).
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ESTERO AMERICANO DAIRY ENHANCEMENT, PHASE II

2. The RCD shall enter into and record an agreement satisfactory to the Executive Officer with the landowner of the project site for the provision of access to the property and monitoring and maintenance of the project.
3. The RCD shall provide documentation that all permits and approvals necessary to completion of the project under federal, state and local laws have been obtained.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the Project Selection Criteria and Guidelines, last updated by the Conservancy on September 20, 2007.
2. The proposed project is consistent with the purposes and objectives of Chapter 4 and Chapter 5.5 of Division 21 of the Public Resources Code (Sections 31150-31156 and 31220).”

**PROJECT SUMMARY:**

The proposed authorization would enable the Gold Ridge Resource Conservation District (RCD) to implement dairy enhancement projects in the Estero Americano watershed in Sonoma and Marin counties with the purpose of improving water quality in the Estero and increasing viability of agricultural lands in the watershed (see Exhibits 1 and 2). The enhancement projects will take place on five dairies in close proximity to the Estero totaling roughly 1,950 acres (Exhibits 2 and 3). All of the project implementation work will take place on dairies where the RCD has been granted access by the landowner and the landowner agrees to maintain the improvements.

With funding from both the State Water Resources Control Board (SWRCB), as well as a previous Conservancy grant authorized in June 2006, the RCD evaluated dairy operations in the watershed during a first phase of the Estero Americano Dairy Enhancement Program. The program included a regional nutrient management planning workshop, the development of comprehensive nutrient management plans for eight dairies, the installation of gutters and stormwater drainage diversions on five dairies, manure transfer and distribution equipment on four dairies, and extensive soil and manure sampling on all participating dairies.

Since its inception, the Estero Americano Watershed Dairy Enhancement Program has developed into a highly collaborative planning effort involving most of the established agricultural resource agencies and industry organizations working in the region (US Department of Agriculture, National Resources Conservation Service (NRCS), the RCD, University of California Cooperative Extension, Western United Dairymen, the California Dairy Quality Assurance Program, the Sonoma County Farm Bureau, and Clover-Stornetta Farms). The reporting and collaboration undertaken under Phase II of the project are expected to lead the way in establishing compliance measures for new efforts by the Regional Water Quality Control Board (RWQCB) to implement strict Waste Discharge Requirements and a Conditional Waiver Program for dairies in the region.

Five of the participating dairies from the initial phase of the project are continuing in Phase II, which will seek to improve water quality and ensure the economic viability of dairy production

## ESTERO AMERICANO DAIRY ENHANCEMENT, PHASE II

in the region through improved manure management practices, the adoption of pasture management practices to promote soil fertility and forage productivity, and water quality protection such as riparian pasture fencing and revegetation, off-channel water development, cross-fencing, and manure composting facilities. The purchase and installation of manure transfer and distribution equipment will allow operators greater control over the timing and rate of manure application to farm fields, which will improve production of forage and reduce the need for increasingly expensive imported feed. The program will also fund conservation planning assistance for each operator enrolled in the program.

### *Enhancement Project Descriptions:*

*Dairy EA RMD:* The project consists of installing 3,300 ft of underground mainline pipe and the purchase of a traveling irrigator gun and pump for manure transfer and distribution to farm fields at agronomic rates. The project also involves the installation of approximately 3,470 ft of cross-fencing, 3,000 ft of water pipe line, and four water troughs to enhance pasture management practices and to reduce pressures from overgrazing. All of the above will be funded, in part, through a new NRCS EQIP contract with the landowner.

*Dairy EA JBD:* The project consists of installing approximately 4,290 ft of cross-fencing, 11,660 ft of water pipeline and the purchase of 5 water troughs to enhance pasture management on a sensitive parcel located adjacent to the estuary. All of the above will be funded, in part, through a new NRCS EQIP contract with the landowner.

*Dairy EA GBD:* The project consists of constructing a composting pad and a concrete solids separator pit to improve manure management and distribution, and to reduce the amount of wastewater generated on the dairy. A solids separator and composting facility will greatly enhance nutrient management and the transfer and distribution of manure to farm fields. Approximately 860 ft of crossing fencing and 6 water troughs will be installed to improve pasture management practices and to reduce pressures from overgrazing in critical areas. This dairy is located on a sensitive parcel adjacent to the estuary. All of the above will be funded, in part, through a new NRCS EQIP contract with the landowner.

*Dairy EA SMD:* The project consists of installing approximately 6,000 ft of underground mainline pipe and the purchase of a traveling irrigator gun and pump for manure transfer and distribution to farm fields at agronomic rates. This dairy is located in a highly sensitive area adjacent to the estuary.

*Dairy EA PBD:* The project consists of installing approximately 3,000 ft of underground mainline pipe and the purchase of a traveling irrigator gun and pump for manure transfer and distribution to farm fields at agronomic rates. This dairy is located in a highly sensitive area along Ebabias Creek, a steelhead trout stream tributary to the Estero Americano.

**Site Description:** The Estero Americano, a coastal estuary that flows to the Pacific Ocean from seven miles inland, is a unique coastal natural area consisting of open water, freshwater marsh, brackish marsh, mud flats, coastal grasslands, and a narrow coastal strand. The adjacent rolling but steep hills are surrounded by agricultural operations on both sides of the stream.

The Estero Americano is one of the most naturally diverse areas on the Northern California coast. It is an area rich in wildlife, migratory waterfowl, and wetland habitats. The waterway and environs are part of the Gulf of the Farallones National Marine Sanctuary and lie within the

## ESTERO AMERICANO DAIRY ENHANCEMENT, PHASE II

United Nations Central Coast International Biosphere Reserve. There are indications of use of the Estero by coho salmon and steelhead trout.

The land within the watershed is comprised of the Merced Formation, characterized by shallow soils and easily eroded landforms. The terrain of gently rolling hills is dotted with ranches, small communities, rural residential development, and eucalyptus windrows. The nature of the terrain makes the watershed a wind-gap area for the passage of coastal breezes and fog from the coast to the inner Bay area.

The Sonoma County Coastal Wetlands Enhancement Plan (1987), adopted by the Conservancy, identifies the Estero Americano as degraded and states that bank erosion, gully erosion, loss of riparian habitat, and sedimentation are common in the watershed. The Estero has also been identified by The Nature Conservancy as one of its “Portfolio Conservation Areas” due to the importance to its coastal wetland system. Nutrient loading into the estuary has also been identified by the Regional Water Quality Control Board and The Estero Americano Watershed Management Plan (2007) as a significant impact to the Estero, as discussed further in the “Consistency with Local Watershed Management Plan” section below.

**Project History:** Through Conservancy and other public funding programs, the RCD has conducted water quality, riparian corridor, and sediment control planning and project implementation in the Estero watershed for nearly a decade.

Through a grant from the Marin Agricultural Land Trust, and with its assistance, a ranch planning process was begun in 1999 as part of the Marin Coastal Watershed Enhancement Project. In 2002, Conservancy funds were authorized for additional ranch plans to provide a comprehensive approach for watershed restoration. The end result of the planning process was an evaluation of each ranch’s current condition and a ranch plan to implement corrective measures. Also, potential environmental impacts were evaluated, and monitoring programs are recommended to track improvements in the ranch environment.

The Estero Americano Ranch Enhancement Design, authorized by the Conservancy in March 2002, addressed the ranch plan implementation process, its cost, funding, and the timing to complete the work. In December 2004, the Conservancy approved ranch implementation funding for eight ranches within the watershed totaling 5,100 acres. Implementation funding for an additional three ranches was authorized by the Conservancy in June 2006, and work was completed in October 2007. The eleven ranches in the Estero receiving ranch enhancements through these projects totaled approximately 5,850 acres.

Parallel to this work, in 2002 the SWRCB published the California Water Quality Assessment Report listing 199 acres of the Estero Americano and the entire length of Americano Creek as impaired water bodies due to nutrient pollution from agricultural sources. In 2004 the RCD applied for and received a Clean Water Act, Section 205(j) planning grant from SWRCB to create a comprehensive watershed management plan for the Estero to address this as well as ongoing sediment impairment through focused identification of the potential sources of these water quality problems and by identifying land management solutions through a voluntary, cooperative planning process.

The stakeholder-based process that followed resulted in the release of The Estero Americano Watershed Management Plan in February 2007. The plan includes analysis of nutrient loading in the watershed, details agricultural best management practices to reduce water quality impacts,

## ESTERO AMERICANO DAIRY ENHANCEMENT, PHASE II

and identifies action plans for priority rangeland water quality management parcels, including the dairies participating in the current project.

The RCD received an additional SWRCB grant in June 2006 to fund the initial phase of the Estero Americano Dairy Enhancement Program. As described above, a portion of the Conservancy's June 2006 authorization also went to this project. The current authorization would further the implementation of the nutrient management plans developed by the program allowing the dairies to shift to more site-specific and appropriate stormwater management, nutrient application and forage management.

### **PROJECT FINANCING:**

Coastal Conservancy	\$155,000
State Water Resources Control Board	\$115,000
USDA NRCS– EQIP Program	\$299,000
RCD/Landowner Cost-share	<u>\$ 58,000</u>
<b>Total Project Cost</b>	<b>\$627,000</b>

Conservancy funds for this project are expected to come from the Conservancy's FY 2006 appropriation from Proposition 50 (the "Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002"). Proposition 50 authorizes the use of these funds for the purpose of protecting coastal watersheds through projects undertaken pursuant to the Conservancy's enabling legislation (Division 21 of the Public Resources Code) to acquire, restore or protect water and land resources (Water Code Section 79570). The proposed project will provide for the improvement of watershed land and water resources through reduction of stormwater impacts due to improved nutrient management systems and the protection of stream corridors on the five dairies that most directly impact the Estero. The project is also entirely consistent with the Conservancy's enabling legislation, as discussed below.

### **CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:**

The project is consistent with Chapter 5.5 (Section 31220) of the Conservancy's enabling legislation, Division 21 of the Public Resources Code, regarding integrated coastal and marine resources protection. Under § 31220(a), the Conservancy may award grants for coastal watershed and coastal water quality protection and restoration projects that achieve one or more of the specified objectives described in §31220(b).

Consistent with § 31220(b)(1) the project will reduce contamination of waters within the coastal zone.

Consistent with § 31220(b)(2) the project will protect fish and wildlife habitat within coastal and marine waters and coastal watershed, through improvement of stormwater runoff from dairies located adjacent to the Estero and within the coastal zone.

Consistent with § 31220(b)(4), the project will reduce unnatural erosion and sedimentation of coastal watersheds, through the implementation of fencing and stormwater management on dairies within the Estero Americano watershed.

As required by § 31220(a), Conservancy staff has consulted with State Water Resources Control Board in the development of the project to ensure consistency with Chapter 3 (commencing with

## ESTERO AMERICANO DAIRY ENHANCEMENT, PHASE II

§ 30915) [Clean Beaches Program] of Division 20.4 of the Public Resources Code [Watershed, Clean Beaches, and Water Quality Act].

Finally, as required by § 31220(c), the project is recommended in or consistent with local watershed management plans. See discussion under “Consistency with Local Watershed Management Plan / State Water Quality Control Plan” section, below and will include ongoing monitoring of sediment and nutrients within the watershed.

The project is also consistent with Chapter 4 of the Conservancy's enabling legislation, Division 21 of the Public Resources Code, regarding the preservation of agricultural land.

Under § 31156, the Conservancy may award grants to public agencies and nonprofits for the purposes of undertaking improvements to and development of land in order to prevent loss of agricultural land. The project will improve the ability of dairy operators to increase production of onsite forage, reducing threats to the viability of agriculture through rapidly rising feed costs. Moreover, the project will further long-term viability of coastal working lands by assisting ranchers to reduce impacts of their operations on wildlife habitat and water quality.

### **CONSISTENCY WITH CONSERVANCY'S 2007 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 6, Objective F** of the Conservancy's 2007 Strategic Plan, the proposed project will improve water quality to benefit coastal resources, through promoting agricultural practices that reduce erosion, sedimentation, and pollution.

Consistent with **Goal 7, Objective C** of the Conservancy's 2007 Strategic Plan, the proposed project will foster the long-term viability of coastal working lands by assisting ranchers to reduce impacts of their operations on wildlife habitat and water quality.

### **CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on September 20, 2007, in the following respects:

#### **Required Criteria**

1. **Promotion of the Conservancy's statutory programs and purposes:** See the “Consistency with Conservancy's Enabling Legislation” section above.
2. **Consistency with purposes of the funding source:** See the “Project Financing” section above.
3. **Support of the public:** The proposed authorization has support from landowners, public agencies, environmental organizations, and community groups that participated in the larger watershed planning process, including UC Cooperative Extension, Western United Dairymen, the California Dairy Quality Assurance Program, the Sonoma County Farm Bureau, and Clover-Stornetta Farms. See letters of support in Exhibit 5.

## ESTERO AMERICANO DAIRY ENHANCEMENT, PHASE II

4. **Location:** The proposed project would be located within the coastal zone of Sonoma and Marin Counties and all ranches on which enhancement work will be done are within the Estero Americano coastal watershed that drains to the ocean. The project will not only benefit the dairies themselves, but also the estuarine habitats adjacent to and downstream of the project area.
5. **Need:** Without Conservancy funds in addition to the significant project funds already secured, the RCD will be unable to fully implement the improvements necessary to achieve desired water quality benefits.
6. **Greater-than-local interest:** The Estero is recognized nationally for its unique mix of coastal and inland resources. The project will serve to address on-going problems that have degraded the waterways and environment within the Estero.

### Additional Criteria

7. **Urgency:** Without Conservancy funding this construction season, the RCD will be unable to complete the dairy enhancements before the winter rains, allowing current impairment of the Estero to continue for another year.
8. **Resolution of more than one issue:** The proposed project would serve not only to improve water quality and the ecological health of the estuary, but to improve coastal dairies' ability to remain viable through increased onsite production animal feed.
9. **Leverage:** See the "Project Financing" section above.
10. **Innovation:** The nutrient management techniques being implemented in the project will demonstrate new dairy management strategies that the Regional Board, US EPA, and RCD are looking towards as models for coastal dairies on the North Coast.
11. **Readiness:** The RCD is prepared to implement the dairy enhancements immediately.
12. **Realization of prior Conservancy goals:** See "Project History" above.
13. **Cooperation:** The Gold Ridge RCD has collaborated with area partners to promote natural resource stewardship and has cooperative relationships with funding agencies, watershed partners and property owners in the western Sonoma County community.

### **CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:**

The proposed project is consistent with Section IV of the Sonoma County Local Coastal Program, certified in 1981 and amended in 2001, concerning resources for agriculture and land management. The project will improve agricultural viability, watershed conservation and correct current detrimental land use and operational practices. The project will also provide nutrient management improvements furthering the soil conservation and water quality protection policies of Sonoma County's General Plan Resource Conservation Element (Sections 2.0-2.2 and 3.0).

The proposed project is also consistent with the Section II policies of the Marin County Unit II Local Coastal Program (MCLCP), certified in 1981 and last amended in 2004, concerning natural resource and agricultural protection. The MCLCP designates the Estero Americano a "Conservation Zone" and calls for reductions in overgrazing and water quality degradation due to agricultural run-off; the current project will serve to directly address these issues. Additionally, the MCLCP cites dairying as the principal contributor to the Marin agricultural

economy and seeks to ensure the continued viability of agriculture in West Marin; the project will serve to complement the agricultural land use protection policies included in the MCLCP.

**CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/  
STATE WATER QUALITY CONTROL PLAN:**

Under Proposition 50, any watershed protection activities financed with Proposition 50 funds must be “consistent with the applicable adopted local watershed management plan and the applicable regional water quality control plan adopted by the regional water quality control board” (Water Code Section 79507).

The proposed project is consistent with the Water Quality Control Plan for the North Coastal Basin adopted by the Regional Water Quality Control Board because the project will promote management practices that protect water quality, in particular reducing nutrient impairment of the Estero. In addition, the project will continue coordination with local agencies/groups in support of non-regulatory, cooperative efforts for nutrient and sediment controls.

The proposed project is also consistent with the RCD and State Water Board’s Estero Americano Watershed Management Plan (2007) in that it specifically implements the plan’s recommendations regarding best management practices for reducing nutrient and other agricultural sources of pollution. Pursuant to the Comprehensive Nutrient Management Plans developed for the dairies during Phase I, the project will help achieve many of the Watershed Plan’s water quality objectives, including: developing a nutrient budgeting and management program for dairies and livestock ranches in the watershed; developing and implementing pollution prevention on dairies; applying manure fertilizer to farm fields at agronomic rates; controlling livestock access to streams; and providing on-going technical assistance to agricultural producers in the watershed.

**COMPLIANCE WITH CEQA:**

Staff has reviewed the project activities and has concluded that all of the restoration activities at each project site are categorically exempt from environmental review, as discussed in detail, by dairy, below.

*Dairy EA RMD (13200 Valley Ford Road):* The project involves the installation of mainline pipe and the purchase of a traveling irrigator gun and pump for improved manure transfer and distribution as well as the installation of cross-fencing, water pipe line, and water troughs to enhance pasture management practices and to reduce pressures from overgrazing.

The installation of improved manure transfer equipment and water pipeline qualifies as categorically exempt under Section 15303 as new construction of limited small new facilities and installation of small, new equipment and facilities in small structures. The installation of fencing and troughs are also exempt under Section 15303 (e) as accessory improvements to existing facilities that are small in scale.

*Dairy EA JBD (15005 Highway 1):* The project consists of installing cross-fencing, water pipeline and water troughs to enhance pasture management. These qualify as categorically exempt under Section 15303 as new construction of limited small new facilities and installation of small, new equipment and facilities in small structures.



## ESTERO AMERICANO DAIRY ENHANCEMENT, PHASE II

*Dairy EA GBD (14055 Valley Ford Estero Rd):* This project consists of the constructing a composting pad and a concrete solids separator pit to improve manure management and distribution, as well as installation of crossing fencing and water troughs to improve pasture management.

The construction of the composting pad and pit are categorically exempt under Section 15303(e), construction of small facilities and structures, as accessory (appurtenant) structures to existing agricultural facilities. The installation of fencing and troughs are also exempt under Section 15303 (e) as accessory improvements to existing facilities that are small in scale.

*Dairy EA SMD (1001 Middle Road):* The project involves the installation or repair of gutters and the installation of pipeline to improve manure transfer and utilization. The project also includes basic data collection and research on soils, vegetation, and manure for natural resource management purposes.

The installation of barn gutters and the enhancement of drainage around facilities qualifies as categorically exempt under Section 15301 as operation, repair, maintenance, or minor alteration of existing private structures, facilities or topographical features involving negligible or no expansion of use.

The installation of improved manure transfer equipment qualifies as categorically exempt under Section 15303 as new construction of limited small new facilities and installation of small, new equipment and facilities in small structures.

Soil, vegetation and manure sampling qualifies as categorically exempt under Section 15306 as basic data collection, research, experimental management, and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource.

*Dairy EA PBD (15000 Highway 1):* The project consists of installing underground mainline pipe and the purchase of a traveling irrigator gun and pump for manure transfer and distribution to farm fields at agronomic rates. The installation of improved manure transfer equipment qualifies as categorically exempt under Section 15303 as new construction of limited small new facilities and installation of small, new equipment and facilities in small structures.

### *Cumulative Impacts*

Staff has also assessed the environmental effects of the various projects and found no substantial evidence of a fair argument that the projects when taken together, along with past and probable future activities, will have a significant affect on the environment, other than a positive benefit to the environment.

Based on the foregoing, staff believes the project exempt from CEQA review. Following the Conservancy's action, staff will file a Notice of Exemption.